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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,974	06/22/2006	Yuji Ando	2936-0278PUS1	8403
2292 7590 10/06/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER BERNSTEIN, DANIEL A				
ART UNIT		PAPER NUMBER		
4166				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/583,974

Applicant(s)

ANDO ET AL.

Examiner

DANIEL A. BERNSTEIN

Art Unit

4166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
Paper No(s)/Mail Date 06/22/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 and 9-17 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2004/0216732 to McFadden (McFadden) in view US Patent 2,719,211 to Lewis et al. (Lewis).

In Reference to claim 1

McFadden discloses a heating chamber in which food is placed (oven cavity 2, Fig. 2); an upper jet hole (apertures 100a and 100b, Fig. 2) through which steam supplied and is jetted toward the food (Fig. 6a shows steam jetted toward the food product from upper apertures 100a and 100b) placed in the heating chamber. McFadden discloses a side jet hole (29a and 29b, Fig.2) that is provided in a side wall (left and right section walls 18a and 18b) of the heating chamber and through which steam supplied from the steam generating device is jetted toward the food (Fig. 6a shows steam jetted toward the food product from lower apertures 29a and 29b). McFadden discloses a fan (left and right blower wheels 16a and 16b) provided for increasing strength with which the steam is jetted out through the jet holes. McFadden also discloses a side jet hole provided in a lower part of each of side walls (Fig. 2 shows 29a and 29b in the lower part of each lower left and right section walls 18a and 18b) of the heating chamber at both sides thereof, and when the food is supported in a state

floating above a floor surface (and Fig. 6a shows the food product 10 supported above the lower apertures 29a and 29b) of the heating chamber by supporting means, the side jet hole is located below the supporting means. McFadden does not teach a steam generating device and that the upper jet hole is provided in a ceiling part of the heating chamber.

Lewis teaches a steam generating device (electric heating element 48 and nozzle head 70 are inside liquid receiving compartment where steam is generated instantly as liquid exits 70, Fig. 3). Lewis teaches that the upper jet hole is provided in a ceiling part of the heating chamber (small openings 68 formed in plate 55, Fig.1).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the speed cooking oven of McFadden with the food steamer of Lewis. Although McFadden is silent to a steam generating device, McFadden mentions the use of steam in combination with other heating means (column 1 paragraph 3, a hybrid oven is defined as an oven that employs a combination of microwave energy and at least one other thermal source convection, radiant energy, and/or **steam** to increase cooking speed over a conventional oven). Therefore, because McFadden mentions that steam could be used as a cooking means there is motivation to combine a steam generator such as in Lewis to introduce steam into the cooking chamber of McFadden for the purpose of providing a source of steam.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to rearrange the upper apertures of McFadden in view of Lewis so that they are disposed on the ceiling of the cooking chamber. Moving the

holes of McFadden to be located on the ceiling or simply integrating the upper apertures 100a and 100b into the ceiling would not modify the operation of the device and therefore would be an obvious rearrangement of parts. McFadden solves the same problem of cooking a food product evenly by introducing an even distribution of heat from the top and bottom. Whether the holes of McFadden are integrated in the ceiling or positioned as shown in Fig. 6a the problem of enveloping the food product with steam and cooking the product evenly is solved.

In Reference to claim 2

McFadden in view of Lewis teaches the food supported in a state floating above the floor surface of the heating chamber by the supporting means (McFadden, 8a, Fig. 7), through the side jet hole (29a and 29b), steam is blown toward under the food (Fig. 6a shows steam being directed toward and below the food product 10).

In Reference to claim 3 and 9

McFadden in view of Lewis teaches the side jet hole (29a and 29b) is so positioned and/or directed that, when the food is supported (supported on 8a, Fig. 7) in a state floating above the floor surface of the heating chamber by the supporting means, the steam jetted out from each side meets under the food (Fig. 6a shows steam from holes 29a and 29b meeting under the food product 10).

In Reference to claim 4, 10 and 11

McFadden does not teach where steam generated by the steam generating device is introduced into a sub-cavity provided adjacent to the heating chamber. McFadden discloses that the steam is heated inside the sub-cavity by heating means

(the steam would be directed to an upper cavity where it would be reheated by 14a and 14b, see Fig.'s 6a and 7, and delivered to the region of heating would be further heated and distributed by heating means 14a and 14b), and the so heated steam is then distributed between the upper jet hole (100a and 100b) and the side jet hole (18a and 18b). The fan of McFadden moves the recirculated reheated steam to the main chamber.

Lewis teaches where steam generated by the steam generating device is introduced into a sub-cavity (steam receiving compartment 61, Fig. 3, Lewis) provided adjacent to the heating chamber (61 is adjacent and above the heating chamber).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the upper cavity of McFadden with the sub-cavity of Lewis. It would have been obvious to introduce the steam from the steam generator into a sub-cavity so that steam would exit the upper jet holes 100a and 100b of McFadden in an equally distributed manner so that when the steam impinged on the food product it would cook evenly.

In Reference to claim 5, 12 and 13

McFadden discloses that steam heated inside the sub-cavity is guided to the side jet hole through a duct formed of a pipe. The recirculated steam travels through the fans into a square duct as shown in Fig. 3 and then it travels through a short square pipe before it is reintroduced into gas transfer sections 17a and 17b.

In Reference to claim 6, 14 and 15

Lewis teaches a sub-cavity that is provided in the ceiling part of the heating chamber (refer to the combination of McFadden and Lewis in the rejection of claim 4 where 61 is adjacent and above the heating chamber).

In Reference to claim 7

McFadden discloses an upper jet hole (McFadden 100a and 100b, Fig. 6a) that is provided in a floor panel of the sub-cavity (see rejection of claim 1 and the combination of McFadden and Lewis).

3. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden in view of US Patent 4,951,648 to Shukla et al (Shukla).

In Reference to claim 8

McFadden does not teach that a total area of the side jet hole is larger than a total area of the upper jet hole.

Shukla teaches that the lower holes 60a and 62a are larger than the upper holes 42 (see Fig. 5 of Shukla).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine McFadden with Shukla so that the total area of the side jet hole is larger than the upper jet hole. This is obvious because Shukla teaches that some food products, like pizza, require more heat delivered to the bottom of the food product to be cooked evenly. Depending on the food, it may be desirable to make the upper or lower holes larger or smaller. Therefore, the size of the holes is obvious design choice that can be determined by routine experimentation.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. BERNSTEIN whose telephone number is (571)270-5803. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM EDT.
4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Bomberg can be reached on 571-272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAB

/Kenneth B Rinehart/
Supervisory Patent Examiner, Art Unit 3749